

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scharschmidt et al (US 3,615,677) in view of Hart (US 4,555,409) for the same reason as stated in the Non-Final Office action mailed 03/20/2009 (pages 2-4).

Metzger et al is cited as evidence as discussed below.

Claims 1, 5 and 8 were amended to specify amounts of the following ingredients:

- from about 75% to about 90% non-steeped non-gelatinized corn material;
- from about 10% to about 25% non-steeped pre-gelatinized corn material;
- from about 5% to about 12% of starch.

In regard to the newly added limitations of amounts of corn materials and starch, it is noted that Scharschmidt et al teaches up to 85 % of corn flour (corn material) and from 0 to 30% of wheat flour (the source of wheat starch (Col. 7 claim 1). As evidenced by Metzger et al amount of starch in wheat flour ranges from 68-91% (Col. 5 lines 35-45). Therefore, by disclosing from 0 to 30% of wheat flour, Scharschmidt et al discloses from 0% to 20.4-27.3% of wheat starch. In regard to the amounts of non-steeped non-gelatinized corn material and non-steeped pre-gelatinized corn material, Scharschmidt et al discloses "[i]n another embodiment of the invention partially pregelatinized corn flour is substituted for some or all of the ungelatinized corn flour used in the formulation". (Col. 5 lines 22-24). Scharschmidt et al discloses that proportion of non-

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gelatinized corn material and pre-gelatinized corn material depends on the degree of gelatinization desired in the final product (Col. 4 lines 61-66). Scharschmidt et al discloses different formulations including substantially non-gelatinized product (Col. 5 lines 45-46). Therefore, one of ordinary skill in the art would have been motivated to modify Scharschmidt et al and to use corn materials in the amounts as recited in order to produce substantially non-gelatinized product as taught by Scharschmidt et al. One of ordinary skill in the art would have been motivated to modify Scharschmidt et al and to vary amounts of corn material depending on the desired degree of gelatinization of the final product as taught by Scharschmidt et al. One of ordinary skill in the art would have been motivated to increase content of non-steeped non-gelatinized corn material and to decrease content non-steeped pre-gelatinized corn material in order to produce the final product having a low degree of gelatinization.

Response to Arguments

Applicant's arguments filed 06/22/2009 have been fully considered but they are not persuasive.

On page 5 of the Reply, Applicant states that the references of record do not disclose specific combination of ingredients as claimed. Further in this regard, Applicant state that “[a]t 85% corn flour, and with a minimum of 15% soy, no wheat could be included. Thus, at that point, Scharschmidt would not include a starch as is claimed in the presently pending claims” (page 5 of the Reply). In response to this argument, it is noted that amount of corn material and starch meet the newly added limitations in claims 1, 5 and 8. As stated above, Scharschmidt et al teaches up to 85 %

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of corn flour (corn material) and from 0 to 30% of wheat flour (the source of wheat starch) (Col. 7 claim 1). As evidenced by Metzger et al amount of starch in wheat flour ranges from 68-91% (Col. 5 lines 35-45). Therefore, by disclosing from 0 to 30% of wheat flour, Scharschmidt et al discloses from 0% to 20.4-27.3% of wheat starch. In regard to soy flour argument, it is noted that soy flour in Scharschmidt et al is added for the protein fortification. It is further noted that Scharschmidt et al is not relied upon as a teaching of protein fortification of corn products. Scharschmidt et al is relied upon as a teaching of a non-steeped corn blend, comprising a non-steeped non-gelatinized corn material, non-steeped pre-gelatinized corn material, calcium carbonate and wheat starch (Abstract; Col. 6, Example III; Col. 5, lines 23-25). One of ordinary skill in the art would have been motivated to modify Scharschmidt et al and to vary amounts of soy flour depending on the desired degree of protein fortification. Production of low-protein, protein-free, high-protein pastas were very well known in the art. Therefore, to modify Scharschmidt et al and to vary degree of protein fortification depending on the personal preferences of the consumer would have been obvious. Varying amount of soy flour would have been obvious matter of choice.

On page 6 of the Reply, Applicant states that:

the rejection should be withdrawn for at least the following added reasons. Hart discloses adding calcium hydroxide to a water/corn mixture. However, the presently pending claims recite a "corn blend" comprising, inter alia, calcium hydroxide. On the other hand, Hart discloses making a water/corn mixture and then adding calcium hydroxide to that mixture, not a corn blend comprising calcium hydroxide, inter alia, as is presently claimed. Additionally, the Office Action points to example III of Scharschmidt as using calcium carbonate. However, it should be noted that in example III, Scharschmidt does not disclose a corn blend as is presently claimed. Example III only discloses corn flour (no mention

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of gelatinization), defatted soy flour, and calcium carbonate, but no wheat flour. It is also noted that examples IV and V disclose calcium carbonate.

First Applicants state that "Hart discloses adding calcium hydroxide to a water/corn mixture. However, the presently pending claims recite a "corn blend" comprising, inter alia, calcium hydroxide". In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Scharschmidt et al discloses presence of calcium carbonate in the dry blend (Examples IV and V). Hart is relied upon as a teaching of production masa-type dough product comprising non-steeped corn material and pH increasing agent (calcium hydroxide).

Further in regard to the argument stated above, Scharschmidt et al is not limited to the examples. Scharschmidt et al is relied upon as a teaching of a non-steeped corn blend, comprising a non-steeped non-gelatinized corn material, non-steeped pre-gelatinized corn material, calcium carbonate and wheat starch (Abstract; Col. 6, Example III; Col. 5, lines 23-25). Example III is relied upon as a teaching of addition of calcium carbonate to the corn blend. Further in this regard and as stated in the Non-Final Office action mailed 03/20/2009, Hart discloses a method of preparation of a non-steeped corned blend that is used to produce masa-type dough product, wherein the method does not include the steeping step (Col. 1, lines 55-63; Col. 2 lines 49-55). Hart discloses production of a masa prepared by the method that completely eliminated the

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step of steeping corn in a lime (calcium hydroxide solution) that result in a masa that is “equally acceptable as the masa prepared by the traditional method”, which Applicant’s intention as well (Col. 2 lines 49-55). Hart discloses “adding calcium hydroxide for taste only of the finished product” (Col. 1 , lines62-63). Both Scharschmidt and Hart disclose preparing a food product by providing a non-steep corn blend comprising corn flour and pH adjusting agent containing calcium cations [lime (calcium hydroxide)/calcium carbonate], providing water, mixing non-steep corn blend and water, forming a dough, forming a food pieces from masa-type dough, and cooking food pieces to form a food product. It is noted that no steeping step is included in the processes, and moreover, Hart discloses production of a masa prepared by the method that completely eliminated the step of steeping corn in a lime (calcium hydroxide solution) that result in a masa that is “equally acceptable as the masa prepared by the traditional method”. Since both Scharschmidt and Hart disclose masa-type dough product comprising non-steeped corn material and pH increasing agent (calcium hydroxide or calcium carbonate), one of the ordinary skill in the art would have been motivated to modify Scharschmidt and to substitute one pH increasing agent containing calcium cations such as calcium carbonate with another pH adjusting agent containing calcium cations such as lime (calcium hydroxide) for the same function. One of the ordinary skill in the art would have been motivated to do so, since both lime (calcium hydroxide) and calcium carbonate are well established in the art as neutralizing agents in preparation of corn masa/dough products. It would have been obvious to one of ordinary skill in the art to add calcium

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hydroxide to the non-steeped corn blend in order to enhance the taste of masa product, as taught by Hart.

In response to the argument that Scharschmidt does disclose anywhere the reason or basis for use of calcium carbonate, it is noted that Scharschmidt et al discloses that calcium can be added for nutritional fortification of the food product (Col. 3 lines 46-47).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VERA STULII whose telephone number is (571)272-3221. The examiner can normally be reached on 7:00 am-3:30 pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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